STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/677,977A
Source: IFW16
Date Processed by STIC: 9/30/05

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.2.2 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses.

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):** U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/24/05

Raw Sequence Listing Error Summary

ERROR DETECTED **SUGGESTED CORRECTION** SERIAL NUMBER: 10/677,977A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to 3. this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
4	Non-ASCII	The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 J	Misuse of n/Xaa	"n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid

IFW16

RAW SEQUENCE LISTING DATE: 09/30/2005
PATENT APPLICATION: **US/10/677,977A** TIME: 12:09:27

Input Set : **A:\25840-501.txt**
Output Set: **N:\CRF4\09302005\J677977A.raw**

```
      3 <110> APPLICANT: Nguyen, Jack
      4       Thanos, Chris
      5       Waugh Ruggles, Sandra
      6       Craik, Charles S.
      8 <120> TITLE OF INVENTION: METHODS OF GENERATING AND SCREENING FOR PROTEASES WITH
ALTERED
      9       SPECIFICITY
     11 <130> FILE REFERENCE: 25840-501
     13 <140> CURRENT APPLICATION NUMBER: 10/677,977A
     14 <141> CURRENT FILING DATE: 2003-10-02
     16 <150> PRIOR APPLICATION NUMBER: 60/425,388
     17 <151> PRIOR FILING DATE: 2002-10-02
     19 <160> NUMBER OF SEQ ID NOS: 20
     21 <170> SOFTWARE: PatentIn version 3.3
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 277
     25 <212> TYPE: PRT
     26 <213> ORGANISM: Homo sapiens
     28 <400> SEQUENCE: 1
     30 Met Glu Asn Thr Glu Asn Ser Val Asp Ser Lys Ser Ile Lys Asn Leu
     31 1               5                  10                  15
     34 Glu Pro Lys Ile Ile His Gly Ser Glu Ser Met Asp Ser Gly Ile Ser
     35             20                  25                  30
     38 Leu Asp Asn Ser Tyr Lys Met Asp Tyr Pro Glu Met Gly Leu Cys Ile
     39         35                  40                  45
     42 Ile Ile Asn Asn Lys Asn Phe His Lys Ser Thr Gly Met Thr Ser Arg
     43     50                  55                  60
     46 Ser Gly Thr Asp Val Asp Ala Ala Asn Leu Arg Glu Thr Phe Arg Asn
     47 65                  70                  75                  80
     50 Leu Lys Tyr Glu Val Arg Asn Lys Asn Asp Leu Thr Arg Glu Glu Ile
     51                 85                  90                  95
     54 Val Glu Leu Met Arg Asp Val Ser Lys Glu Asp His Ser Lys Arg Ser
     55             100                 105                 110
     58 Ser Phe Val Cys Val Leu Leu Ser His Gly Glu Glu Gly Ile Ile Phe
     59         115                 120                 125
     62 Gly Thr Asn Gly Pro Val Asp Leu Lys Lys Ile Thr Asn Phe Phe Arg
     63     130                 135                 140
     66 Gly Asp Arg Cys Arg Ser Leu Thr Gly Lys Pro Lys Leu Phe Ile Ile
     67 145                 150                 155                 160
     70 Gln Ala Cys Arg Gly Thr Glu Leu Asp Cys Gly Ile Glu Thr Asp Ser
     71                 165                 170                 175
     74 Gly Val Asp Asp Asp Met Ala Cys His Lys Ile Pro Val Asp Ala Asp
     75             180                 185                 190
     78 Phe Leu Tyr Ala Tyr Ser Thr Ala Pro Gly Tyr Tyr Ser Trp Arg Asn
```

Does Not Comply
Corrected Diskette Needed

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Input Set : A:\25840-501.txt
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```
79          195                 200                 205
82 Ser Lys Asp Gly Ser Trp Phe Ile Gln Ser Leu Cys Ala Met Leu Lys
83      210                 215                 220
86 Gln Tyr Ala Asp Lys Leu Glu Phe Met His Ile Leu Thr Arg Val Asn
87 225                 230                 235                 240
90 Arg Lys Val Ala Thr Glu Phe Glu Ser Phe Ser Phe Asp Ala Thr Phe
91                  245                 250                 255
94 His Ala Lys Lys Gln Ile Pro Cys Ile Val Ser Met Leu Thr Lys Glu
95              260                 265                 270
98 Leu Tyr Phe Tyr His
99          275
102 <210> SEQ ID NO: 2
103 <211> LENGTH: 6
104 <212> TYPE: PRT
105 <213> ORGANISM: Homo sapiens
107 <400> SEQUENCE: 2
109 Phe Ser Phe Asp Ala Thr
110 1               5
113 <210> SEQ ID NO: 3
114 <211> LENGTH: 42
115 <212> TYPE: DNA
116 <213> ORGANISM: Artificial Sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: Granzyme B Mutation Forward Primer
121 <400> SEQUENCE: 3
122 ccagcgtata attctaagac agcctccaat gacatcatgc tg                    42
125 <210> SEQ ID NO: 4
126 <211> LENGTH: 6
127 <212> TYPE: PRT
128 <213> ORGANISM: Homo sapiens
130 <400> SEQUENCE: 4
132 Ile Glu Thr Asp Ser Gly
133 1               5
136 <210> SEQ ID NO: 5
137 <211> LENGTH: 42
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial Sequence
141 <220> FEATURE:
142 <223> OTHER INFORMATION: Granzyme B Mutation Reverse Primer
144 <400> SEQUENCE: 5
145 cagcatgatg tcattggagg ctgtcttaga attatacgct gg                    42
148 <210> SEQ ID NO: 6
149 <211> LENGTH: 6
150 <212> TYPE: PRT
151 <213> ORGANISM: Homo sapiens
154 <220> FEATURE:
155 <221> NAME/KEY: Variant
156 <222> LOCATION: (1)..(1)
157 <223> OTHER INFORMATION: Wherein Xaa is an N-acetyl group.
```

Xaa can only represent a single amino acid, nothing else (see item 13 on Error Summary Sheet)

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Input Set : A:\25840-501.txt
Output Set: N:\CRF4\09302005\J677977A.raw

same error

```
     159 <220> FEATURE:
     160 <221> NAME/KEY: Variant
     161 <222> LOCATION: (6)..(6)
     162 <223> OTHER INFORMATION: Wherein Xaa is a 7-amino-4-methylcoumarin group.
     164 <400> SEQUENCE: 6
W--> 166 Xaa Ile Glu Pro Asp Xaa
     167 1               5
     170 <210> SEQ ID NO: 7
     171 <211> LENGTH: 4
     172 <212> TYPE: PRT
     173 <213> ORGANISM: Homo sapiens
     175 <400> SEQUENCE: 7
     177 Ala Glu Ala Lys
     178 1
     181 <210> SEQ ID NO: 8
     182 <211> LENGTH: 4
     183 <212> TYPE: PRT
     184 <213> ORGANISM: Homo sapiens
     186 <400> SEQUENCE: 8
     188 Glu Asn Val Lys
     189 1
     192 <210> SEQ ID NO: 9
     193 <211> LENGTH: 4
     194 <212> TYPE: PRT
     195 <213> ORGANISM: Homo sapiens
     197 <400> SEQUENCE: 9
     199 Gly Thr Glu Asp
     200 1
     203 <210> SEQ ID NO: 10
     204 <211> LENGTH: 4
     205 <212> TYPE: PRT
     206 <213> ORGANISM: Homo sapiens
     208 <400> SEQUENCE: 10
     210 Ser Pro Thr Arg
     211 1
     214 <210> SEQ ID NO: 11
     215 <211> LENGTH: 4
     216 <212> TYPE: PRT
     217 <213> ORGANISM: Homo sapiens
     219 <400> SEQUENCE: 11
     221 Val Ser Thr Arg
     222 1
     225 <210> SEQ ID NO: 12
     226 <211> LENGTH: 4
     227 <212> TYPE: PRT
     228 <213> ORGANISM: Homo sapiens
     230 <400> SEQUENCE: 12
     232 Ser Thr Ser Phe
     233 1
```

RAW SEQUENCE LISTING DATE: 09/30/2005
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Input Set : **A:\25840-501.txt**
Output Set: **N:\CRF4\09302005\J677977A.raw**

```
236 <210> SEQ ID NO: 13
237 <211> LENGTH: 4
238 <212> TYPE: PRT
239 <213> ORGANISM: Homo sapiens
241 <400> SEQUENCE: 13
243 Lys Phe Pro Asp
244 1
247 <210> SEQ ID NO: 14
248 <211> LENGTH: 4
249 <212> TYPE: PRT
250 <213> ORGANISM: Homo sapiens
252 <400> SEQUENCE: 14
254 Ala Glu Gln Arg
255 1
258 <210> SEQ ID NO: 15
259 <211> LENGTH: 4
260 <212> TYPE: PRT
261 <213> ORGANISM: Homo sapiens
263 <400> SEQUENCE: 15
265 Lys Tyr Ala Asp
266 1
269 <210> SEQ ID NO: 16
270 <211> LENGTH: 4
271 <212> TYPE: PRT
272 <213> ORGANISM: Homo sapiens
274 <400> SEQUENCE: 16
276 Asn Gly Pro Lys
277 1
280 <210> SEQ ID NO: 17
281 <211> LENGTH: 4
282 <212> TYPE: PRT
283 <213> ORGANISM: Homo sapiens
285 <400> SEQUENCE: 17
287 Ser Ser Ala Tyr
288 1
291 <210> SEQ ID NO: 18
292 <211> LENGTH: 4
293 <212> TYPE: PRT
294 <213> ORGANISM: Homo sapiens
296 <400> SEQUENCE: 18
298 Gly Thr Ser Asp
299 1
302 <210> SEQ ID NO: 19
303 <211> LENGTH: 4
304 <212> TYPE: PRT
305 <213> ORGANISM: Homo sapiens
307 <400> SEQUENCE: 19
309 Ala Gln Glu Lys
310 1
```

313 <210> SEQ ID NO: 20
314 <211> LENGTH: 4
315 <212> TYPE: PRT
316 <213> ORGANISM: Homo sapiens
318 <400> SEQUENCE: 20
320 Arg Ile Asp Tyr
321 1

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Input Set : **A:\25840-501.txt**
Output Set: **N:\CRF4\09302005\J677977A.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:6; Xaa Pos. 1,6

VERIFICATION SUMMARY DATE: 09/30/2005
PATENT APPLICATION: **US/10/677,977A** TIME: 12:09:28

Input Set : **A:\25840-501.txt**
Output Set: **N:\CRF4\09302005\J677977A.raw**

L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0